A MULTILAYERED PROSTHESIS MATERIAL AND A METHOD OF PRODUCING SAME

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PCT No. PCT/SE85/00018 Sec. 371 Date Sep. 13, 1985 Sec. 102(e) Date Sep. 13, 1985 PCT Filed Jan. 17, 1985 PCT Pub. No. WO85/03444 PCT Pub. Date Aug. 15, 1985.A method producing a multilayered prosthesis material for use with a living body, said material showing mechanical compliance vis-à-vis soft body tissue and possessing biocompatibility. The method comprising the steps: (a) preparing a copolymer solution using a solvent; (b) coating a substrate with a uniform thickness of said solution; (c) precipitating the initial coating resulting from step (b) to form a physically stable structure having pores substantially uniformly distributed therein by treating the coating with a precipitating solution which is miscible in said solvent but functioning as a precipitating non-solvent with respect to the copolymer; and (d) repeating steps (a)-(c), as required to form the multilayered material, characterized by preparing in step (a) a solution containing less than 5% by weight of polymer. Also disclosed is a multilayered prosthesis material possessing biocompatibility and showing mechanical compliance vis-à-vis soft body tissue, comprising several porous layers of block copolyurethane interconnected by linking fibers integral with the respective adjacent layers.